

### **Listing of Claims**

This listing of claims replaces all prior versions and listings of claims in the application:

Claims 1.-12. (Canceled)

13. (Currently Amended) A method, comprising:  
receiving a cardiac biological signal that includes information describing events, wherein events comprise periods in time when an information content of the cardiac biological signal is of increased relevance to a particular purpose and the events are demarcated by periods of time that are not of increased relevance to the particular purpose;

determining a merit of the information in the cardiac biological signal describing each event based on one or more of a severity of a cardiac condition associated with the event and a quality of the information describing the event;

transmitting, for medical purposes, information describing a first proper subset of the events that have merits meeting a merit criterion to a remote medical receiver; and  
discarding information describing a second proper subset of the events that have merits that fail to meet the merit criterion.

14. (Previously Presented) The method of claim 13, wherein transmitting the information describing the first proper subset of events comprises transmitting the information describing the first proper subset of events meeting a merit criterion that is based on merits of other events.

15. (Previously Presented) The method of claim 13, wherein determining the merit of information describing each event comprises determining the merit based on both the severity of the cardiac condition and the quality of the information describing the event.

16. (Previously Presented) The method of claim 13, wherein transmitting the information describing the first proper subset comprises transmitting the information describing events that have merits among a certain number of the most meritorious.

17. (Previously Presented) The method of claim 13, wherein the first proper subset of the events comprises events that occur within a certain time span and excludes events occurring outside the certain time span.

18. (Previously Presented) The method of claim 17, wherein the first proper subset of the events comprises events that occur within a predetermined time span and excludes events occurring outside the predetermined time span.

Claims 19.-25. (Canceled)

26. (Previously Presented) The method of claim 13, wherein receiving the cardiac biological signal comprises receiving a measurement of electrical potential.

27. (Previously Presented) The method of claim 13, further comprising identifying each event in the received cardiac biological signal.

28. (Previously Presented) The method of claim 27, wherein identifying each event comprises identifying one or more of an asystole event, a tachycardia event, a bradycardia event, and an atrial fibrillation/flutter event based on identifying characteristics of these events.

29. (Previously Presented) The method of claim 27, wherein identifying each event comprises identifying the event based on a frequency of heart beats.

30. (Previously Presented) The method of claim 13, further comprising associating information describing each event in the first proper subset with information describing a time span in which the event occurred.

31. (Previously Presented) The method of claim 30, wherein:  
the method further comprises determining a category of each event in the first proper subset; and

associating the information describing each event in the first proper subset with the information describing the time span comprises associating the information describing each event in the first proper subset with the information describing the time span when the event merit places the event within a certain number of the most meritorious events of the category of the event.

32. (Previously Presented) The method of claim 30, wherein associating the information describing each event in the first proper subset with the information describing the time span comprises associating the information describing each event in the first proper subset with the information describing the time span when the event merit is among a predetermined number of the most meritorious events.

33. (Previously Presented) The method of claim 30, wherein associating the information describing each event in the first proper subset with the information describing the time span comprises generating a data structure having a time stamp associated with the information describing the event.

34. (Previously Presented) The method of claim 13, further comprising comparing a first merit of information describing a first event with a second merit of information describing a second event to identify a more meritorious event.

35. (Previously Presented) The method of claim 34, further comprising creating an episode describing the more meritorious event.

36. (Previously Presented) The method of claim 35 wherein creating the episode comprises summarizing a relevance of the information describing the more meritorious event.

37. (Currently Amended) An article comprising one or more machine-readable media storing instructions operable to cause one or more machines to perform operations, the operations comprising:

receiving a cardiac biological signal that includes information describing events, wherein events comprise periods in time when an information content of the cardiac biological signal is of increased relevance to a particular purpose and the events are demarcated by periods of time that are not of increased relevance to the particular purpose;

determining a merit of the information in the cardiac biological signal describing each event based on one or more of a severity of a cardiac condition associated with the event and a quality of the information describing the event;

transmitting, for medical purposes, information describing a first proper subset of the events that have merits meeting a merit criterion to a remote medical receiver; and discarding information describing a second proper subset of the events that have merits that fail to meet the merit criterion.

38. (Previously Presented) The article of claim 37, wherein transmitting the information describing the first proper subset of events comprises transmitting the information describing the first proper subset of events meeting a merit criterion that is based on merits of other events.

39. (Previously Presented) The article of claim 37, wherein determining the merit of information describing each event comprises determining the merit based on both the severity of the cardiac condition and the quality of the information describing the event.

40. (Canceled)

41. (Previously Presented) The article of claim 37, wherein the operations further comprise associating information describing each event in the first proper subset with information describing a time span in which the event occurred.

42. (Previously Presented) The article of claim 41, wherein:  
the operations further comprise determining a category of each event in the first proper subset; and

associating the information describing each event in the first proper subset with the information describing the time span comprises associating the information describing each event in the first proper subset with the information describing the time span when the event merit places the event within a certain number of the most meritorious events of the category of the event.

43. (Previously Presented) The article of claim 41, wherein associating the information describing each event in the first proper subset with the information describing the time span comprises associating the information describing each event in the first proper subset with the information describing the time span when the event merit is among a predetermined number of the most meritorious events.

44. (Previously Presented) The article of claim 41, wherein associating the information describing each event in the first proper subset with the information describing the time span comprises generating a data structure having a time stamp associated with the information describing the event.

45. (Previously Presented) The article of claim 37, wherein the operations further comprise creating an episode describing the more meritorious event.

46. (Previously Presented) The article of claim 45, wherein creating the episode comprises summarizing a relevance of the information describing the more meritorious event.

47. (Previously Presented) The article of claim 37, wherein the cardiac biological signal comprises an electrocardiogram signal.

48. (Previously Presented) The article of claim 37, wherein:

a first event described in the cardiac biological signal has a first duration;

a second event described in the cardiac biological signal has a second duration; and

the first duration is not equal to the second duration.

49. (Previously Presented) The article of claim 37, wherein the operations comprise identifying a tachycardia event.

50. (Previously Presented) The article of claim 37, wherein the operations comprise identifying a bradycardia event.

51. (Previously Presented) The article of claim 37, wherein the operations comprise identifying an atrial fibrillation/flutter event.

52. (Previously Presented) The method of claim 13, wherein the cardiac biological signal comprises an electrocardiogram signal.

53. (Previously Presented) The method of claim 13, wherein:

a first event described in the cardiac biological signal has a first duration;

a second event described in the cardiac biological signal has a second duration; and

the first duration is not equal to the second duration.

54. (Previously Presented) The method of claim 27, wherein identifying the event comprises identifying a tachycardia event.

55. (Previously Presented) The method of claim 27, wherein identifying the event comprises identifying a bradycardia event.

56. (Previously Presented) The method of claim 27, wherein identifying the event comprises identifying an atrial fibrillation/flutter event.

57. (Previously Presented) The method of claim 30, wherein associating information describing each event in the first proper subset comprises associating raw data drawn from an electrocardiogram with information describing the time span in which the event occurred.

58. (Previously Presented) The method of claim 30, wherein the cardiac biological signal comprises a stream of information describing a state of a heart of a biological system.

59. (Currently Amended) A method, comprising:  
receiving a cardiac biological signal that includes information describing events, wherein events comprise periods in time when an information content of the cardiac biological signal is of increased relevance to a particular purpose and the events are demarcated by periods of time that are not of increased relevance to the particular purpose;  
determining a merit of the information in the cardiac biological signal describing each event based on one or more of a severity of a cardiac condition associated with the event and a quality of the information describing the event;

determining a category of each of the events;  
handling, for medical purposes, information describing a first proper subset of the events that have merits within a certain number of the most meritorious events of the category determined for the event, wherein handling the information includes associating the information describing each event in the first proper subset with information describing a time span in which the merit of the information describing each event places the described event within the certain number of the most meritorious events of the category determined for the event; and

discarding information describing a second proper subset of the events that have merits that fail to meet the merit criterion.

60. (Currently Amended) An article comprising one or more machine-readable media storing instructions operable to cause one or more machines to perform operations, the operations comprising:

receiving a cardiac biological signal that includes information describing events, wherein events comprise periods in time when an information content of the cardiac biological signal is of increased relevance to a particular purpose and the events are demarcated by periods of time that are not of increased relevance to the particular purpose;

determining a merit of the information in the cardiac biological signal describing each event based on one or more of a severity of a cardiac condition associated with the event and a quality of the information describing the event;

determining a category of each of the events;

handling, for medical purposes, information describing a first proper subset of the events that have merits within a certain number of the most meritorious events of the category determined for the event, wherein handling the information includes associating the information describing each event in the first proper subset with information describing a time span in which the merit of the information describing each event places the described event within the certain number of the most meritorious events of the category determined for the event; and

discarding information describing a second proper subset of the events that have merits that fail to meet the merit criterion.